MATH 2413.004 - CALCULUS I

MTWRF 1:00-1:50 P.M. BINNION 326
COURSE SYLLABUS: FALL 2015

Instructor: Dr. Mehmet Celik
Office Location: Binnion 303A
Office Hours: Mon. 9am-11am; Tues. 10am-11am; Wed. 8am-11am; Thur. 10am-11am; Fri. 9am-11am; or by appointment
Office Phone: 903-468-3330
University Email Address: Mehmet.Celik@tamuc.edu

Preferred Form of Communication: email
Communication Response Time: 4 hours from 8am to 5pm in MTWRF

COURSE INFORMATION

Materials

Textbook(s) Required: Calculus, 8th Edition, by James Stewart. ISBN 978-1-2857406-2-1. Material covered during the session will be Sections 1.4-1.8, Chapters 2, 3, and 4, and 6.2, 6.3, and 6.4. We may occasionally cover enrichment activities not in the text.

Course Description: This course examines differential and integral calculus of functions of one variable, as follows. Topics include limits; continuity; derivatives; curve sketching; applications of the derivative; the definite integral; derivatives and integrals of trigonometric functions; and use of computer technology. Prerequisite Two years of high school algebra and trigonometry or Math 142.

COURSE OUTLINE / CALENDAR

WEEKLY SCHEDULE:

(Week 1). 1.4, 1.5
(Week 2). 1.6, 1.7, 1.8,
(Week 3). 2.1, 2.2, 2.3
(Week 4). 2.4, 2.5, 2.6
(Week 5). 2.6, 2.7, 2.8
(Week 6). 2.9, Exam 1
(Week 7). 3.1, 3.2
(Week 8). 3.3, 3.4, 3.5
(Week 9). 3.6, 3.7
(Week 10). 3.8, 3.9, 4.1,
(Week 11). 4.2, Exam 2
(Week 12). 4.3, 4.4, 4.5
(Week 13). 6.2, 6.3,
(Week 14). 6.4 1.7
(Week 15). Review
(Week 16). FINAL WEEK

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by email and in-class announcements.

Student Learning Outcomes

Core Objectives: This course addresses the core objectives of critical thinking skills, communication skills, and empirical and quantitative skills

Core Objective 1: Critical Thinking
To include creative thinking, innovation, inquiry, analysis, evaluation, and synthesis of information.
Student Learning Outcomes. Students will:
1. Explain a given problem, question, or issue;
2. Evaluate the logic and validity of arguments, and the relevance of data and information; and
3. Use investigative and analytical thinking skills to examine alternatives, explore complex questions, and solve challenging problems.

Core Objective 2: Communication Skills
To include effective development, interpretation and expression of ideas through written, oral, and visual communication.

Goal 1: Written Communication
Student Learning Outcomes. Students will:
1. Demonstrate an understanding of context, audience, purpose, and disciplinary conventions;
2. Demonstrate content development to convey understanding of ideas;
3. Demonstrate use of sources and evidence to support ideas; and
4. Use language that skillfully communicates meaning to readers.

Goal 2: Oral Communication
Student Learning Outcomes. Students will:
1. Articulate a central message using supporting material (explanations, examples, illustrations, statistics, analogies, and quotations from relevant authorities);
2. Demonstrate an organized presentation structure to support ideas; and
3. Demonstrates effective verbal and nonverbal delivery.

Core Objective 3: Empirical and Quantitative Skills
To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
Student Learning Outcomes. Students will:
1. Demonstrate an understanding of and represent mathematical information symbolically, graphically, numerically, and verbally;
2. Perform calculations that are essentially successful and sufficiently comprehensive to solve the problem.
3. Reach competent judgments and draw reasonable and appropriately qualified conclusions based on the quantitative analysis of data.

Student Assessment Outcomes
This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

1. *Critical Thinking:* Will be measured through one or more of the following: quizzes, projects, and/or exams
2. *Oral, Visual, and Written communication Skills:* Will be measured through one or more of the following: quizzes, projects, and/or exams

3. *Empirical and Quantitative Skills:* Will be measured through one or more of the following: quizzes, projects, and/or exams

COURSE REQUIREMENTS

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Exams – (in class) There will be two Mid-term exams. You will have a full class period (50 minutes) to complete each.
Exam 1: Wednesday *October 7th* (Week #6)
Exam 2: Wednesday *November 11th* (Week #11)
Make-up exams are possible only if there is a documented emergency.

Final Exam - (in class) Comprehensive Final Exam.
Final Exam: Friday, *December 18th* from 10:30am to 12:30pm.

In-class Quizzes –There will be no make-ups for any missed in-class quizzes. Instead, at the end of the semester only the highest ten in-class quizzes will be considered. Moreover, a student attending at least once a math colloquium (offered by the Department of Mathematics http://www.tamuc.edu/academics/colleges/scienceEngineeringAgriculture/departments/mathematics/about-us/Colloquium/default.aspx) or participating in a math club activity (http://www.tamuc.edu/academics/colleges/scienceEngineeringAgriculture/departments/mathematics/students/mathClubs.aspx) will recieve a full score for one in-class quiz in the semester.

Chapter Online Homework Assignments (from WebAssign): There is an online supplement to your textbook called WebAssign. There will be an online homework assignment in WebAssign for each section covered in the course. You will have an unlimited number of attempts to complete an assignment by the due date given and your highest grade will be recorded. You will see some of these problems (verbatim or with slight variations) on tests, so completing the online homework problems is strongly encouraged! The Class section URL is going to be provided in the first day of class.

Attendance: Class attendance will be taken. There is a strong correlation between attendance and final grades. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Homework: There will be suggested problems assigned for each section. The answers to most of these problems are in the text, so I will not collect them. However, you will see some of these problems (verbatim or with slight variations) on tests and in-class quizzes, so completing the problems is strongly encouraged!

The key to success in this course is regularly working with other students in the class, doing the homework early and asking questions when you have them!!! We will discuss homework problems in class, but there will often not be enough time to discuss all of them. Please come to office hours or visit the math tutoring lab if you have additional questions about the homework.

Workload and Assistance: You should expect to spend 8 to 12 hours each week, outside of class, on the course material. This includes reading, homework, and studying for quizzes and exams. Some weeks (those in which an exam is scheduled, for instance) may require more of your time, other weeks may require less, but on average, budget 8 to 12 hours each week. In order to be successful in this class you should spend much of this time working with other students in the class! Please ask questions and seek assistance as needed. You may email me at any time, and I strongly encourage you to make use of my office hours.

GRADING

Grading Matrix: This class will be graded on a total points system. 400 points are possible in the class. The following grading matrix presents how your total score is going to be calculated at the end of the semester of Fall 2015 for Math 2143-004 course. All the grading instruments are assigned between the first day of class and last day of class of Fall 2015 semester. The Final exam is the last grading instrument of the course; the date of the Final Exam is: Friday, *December 18th* from 10:30am to 12:30pm. The grade is completely objective and is determined solely by student performance on each of the evaluation criteria (Mid-term exams, in-class quizzes, on-line HW assignments, and the final exam). *Do not expect Extra Credit assignments!*

Instrument	**Value (points)**	**Total**
In-class Quizzes	The best 10 in-class quizzes (best 10 scores)	100
On-line HW Assignments	Best 20 online homework assignments will be considered.	50
Mid-term Exams	2 Mid-term exams at 75 points each	150
Final Exam	One comprehensive final exam at 100 points	100
Total:		400

Grade Determination:
A = 400 – 360 pts; i.e. 90% or better
B = 320 – 359 pts; i.e. 80 – 89 %
C = 280 – 319 pts; i.e. 70 – 79 %

D = 240 – 279 pts; i.e. 60 – 69 %
F = 239 pts or below; i.e. less than 60%

TECHNOLOGY REQUIREMENTS

Use of a graphing calculator having at least the capabilities of the TI-83 will be helpful throughout the course. TI-89 is highly recommended. A computer algebra system will be used for some problem exploration, enhanced conceptual understanding, and to engage students as active participants in the learning process.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

An eCollege website has been created for the course which may be accessed from student myLEO accounts following the eCollege and then the My Courses tabs. All files and documents that the instructor shares with the class will be posted in the Document Sharing folder in the course website. eCollege is the Learning Management System used by Texas A&M University-Commerce. You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000.

My primary form of communication with the class will be through eCollege Email and Announcements. Any changes to the syllabus or other important information critical to the class will be disseminated to students in this way via your eCollege Email address available to me through MyLeo and in Announcements. It will be your responsibility to check your eCollege Email and Announcements regularly.

Tutoring services up to the level of Calculus I is provided by the Math Skill Center (Binnion Room 328) with the following hours: MW, 8am–8pm; TR, 8am–6pm; and F 8am–12pm.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures

Academic Honesty

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including (but not limited to) receiving a failing grade on the assignment, the possibility of failure in the course and dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. In ALL instances, incidents of academic dishonesty will be reported to the Department Head. Please be aware that academic dishonesty includes (but is not limited to) cheating, plagiarism, and collusion.

Cheating is defined as:

- Copying another's test of assignment

- Communication with another during an exam or assignment (i.e. written, oral or otherwise)
- Giving or seeking aid from another when not permitted by the instructor
- Possessing or using unauthorized materials during the test
- Buying, using, stealing, transporting, or soliciting a test, draft of a test, or answer key

Plagiarism is defined as:

- Using someone else's work in your assignment without appropriate acknowledgement
- Making slight variations in the language and then failing to give credit to the source

Collusion is defined as:

- Collaborating with another, without authorization, when preparing an assignment

If you have any questions regarding academic dishonesty, ask. Otherwise, I will assume that you have full knowledge of the academic dishonesty policy and agree to the conditions as set forth in this syllabus.

Late/Make-up Policy: Make-up exams are possible only if there is a documented emergency. There will be no make-ups for any missed in-class quizzes. Instead, at the end of the semester only the highest ten in-class quizzes will be considered. Late work on online homework will not be accepted without a documentable and valid excuse. Examples of documentable and valid excuses include:

*car accident w/ police report
*illness w/ doctor's note (you or your child)
*athletic or other mandatory extra-curricular travel
*field trip for another class
*being detained upon entering the country by Homeland Security

University Specific Procedures

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library- Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Student's Guide Handbook, Policies and Procedures, Conduct.*) This means that rude and/or disruptive behavior will not be tolerated.

Texas A&M University – Commerce is committed to a safe, accepting environment for all students regardless of sexual orientation, gender identification, or gender expression: A&M-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Copyright Policy:

The handouts used in this course are copyrighted. By "handouts," I mean all materials generated for this course, which include but are not limited to syllabi, lecture notes, quizzes, exams, in-class materials, review sheets, projects, and problems sets. Because these materials are copyrighted, you do not have the right to copy and distribute the handouts, unless I expressly grant permission.